

<p>2001-320645/34 UNITIKA LTD 1999.06.29 1999-183348(+1999JP-183348) (2001.01.16) C02F 1/58, C01B 25/45</p> <p>Granulated phosphorous removal apparatus for removing magnesium ammonium phosphate contained in waste water, has solid liquid separator provided at waste water inlet and liquid circulator at waste water outlet C2001-098924</p>	<p>D(4-B7B) E(11-Q2, 31-K7)</p> <p>containing ammonium ion and phosphate ion, magnesium compound and alkali chemical and treated water outlet (8) at upper portion. Bottom of the tower is equipped with solid particle discharge pipe (4) for drawing out solid particles and gas blow-in pipe (3) for supplying air. A solid liquid separator (9) is provided in front portion of waste water inlet (2) and liquid circulator (17) is provided at exterior end of treated water flow out pipe (8) for removing traces of phosphorous compound remaining in treated water.</p> <p><u>USE</u> For removing phosphorous contained in waste water.</p> <p><u>ADVANTAGE</u> The granulation tower efficiently recovers magnesium ammonium phosphate of good quality, even when suspended solid concentration in waste water is high.</p> <p><u>DESCRIPTION OF DRAWING</u> The figure shows outline of granulated phosphorous removal</p>
<p><u>NOVELTY</u> Granulated phosphorous removal apparatus has magnesium ammonium phosphate granulating tower equipped with inlets for alkali chemical, waste water (WW) and magnesium compound and treated water outlet (8) at upper portion, solid particle discharge pipe and gas blow-in pipe at bottom. A solid liquid separator is provided in front end of WW inlet and liquid circulator is provided at exterior end of outlet (8).</p> <p><u>DETAILED DESCRIPTION</u> Granulated phosphorous removal apparatus has magnesium ammonium phosphate and magnesium compound granulating tower (1) equipped with inlets (2,5,6) individually for injecting waste water</p>	<p>JP 2001009472-A+</p>

apparatus.

Magnesium granulating tower 1

Waste water Inlet 2

Gas blow-in pipe 3

Solid particle discharge pipe 4

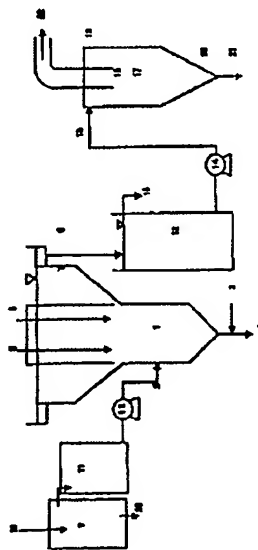
Magnesium compound 5

Alkali chemical 6

Treated water outlet 8

Separator 9

Liquid circulator 17



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